

CHAPLENKO, B.V.; SHCHEGLOVSKIY, G.V. [Shcheglov's'kyi, H.V.], inzh.

Our experience in the loose maintenance of cattle in summer field base. Mekh. sil'. hosp. 11 no.5:5-6 My '60. (MIRA 14:3)

1. Direktor sovkhoza "Peremoha," Vasil'yevskogo rayona, Zaporozhskoy oblasti (for Chaplenko).
(Dairy barns)

CHAPLENKO, V.; GONCHAROV, V., nauchnyy sotrudnik; MALYGIN, M.,
nauchnyy sotrudnik

Fruits of prudent management. Nauka i pered.op.v sel'khoz. 9
no.1:25-28 Ja '59. (MIRA 13:3)

1. Direktor molochno-myasanogo sovkhosa "Peremoga" Vasil'yevskogo
rayona, Zaporozhskoy oblasti (for Chaplenko). 2. Vsesoyuznyy
nauchno-issledovatel'skiy institut ekonomiki sel'skogo khozyaystva
(for Goncharov, Malygin).

(Vasil'yevka District (Zaporozh'ye Province)--Dairying)

CHAPLENKO, V.

Building shelters for the loose housing of cattle on the "Peremoga"
State Farm. Sil'. bud. 9 'no.10:3 .0 '59. (MIRA 13:3)

1. Direktor sovkhoza "Peremoga," Vasil'yevskogo rayona,
Zaporoshchskoy oblasti.
(Vasil'yevka District--Dairy barns)

CHAPLENKOV, G.I., redaktor.

[Manual of accounting for spinning production and the cotton industry]
Rukovodstvo po uchetu priadil'nogo proizvodstva i khlopchatobumashnoi pro-
myshlennosti. Pod red. G.I.Chaplenkova. [Moskva] Gizlegprom, 1946. 98 p.
(MLRA 6:7)

I. Russia (1923- U.S.S.R.) Narodnyy komissariat tekstil'noy promyshlen-
nosti. Tsentral'naya bukhgalteriya. (Cotton manufacture--Accounting)

DYKHNE, A.M.; CHAPLIK, A.V.

Variation of the adiabatic invariant of a particle in a
magnetic field. Zhur. eksp. i teor. fiz. 40 no.2:666-669
F '61. (MIRA 14:7)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya
AN SSSR.

(Particles (Nuclear physics)) (Magnetic fields)

DYKHNE, A.M.; CHAPLIK, A.V.

Normalization of the wave functions of quasi-stationary states.
Zhur. eksp. i teor. fiz. 40 no.5:1427-1428 My '61.

(MIRA 14:7)

1. Institut radiofiziki i elektroniki Sibirskego otdeleniya
AN SSSR.

(Coulomb functions)

24,4400

39663

S/056/62/043/001/013/056
B125/B102AUTHOR: Chaplik, A. V.

TITLE: Quasi-classical wave function of a system with many degrees of freedom

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 1(7), 1962, 84-86

TEXT: An approximate expression is presented for the quasi-classical wave function of a system with n degrees of freedom and with a discrete spectrum. The variables in the term H_0 of the Hamiltonian $H_0 + V$ (V - perturbation) of this system can be separated so that the wave functions $\psi_{(n_k)}^0$ of the unperturbed system are known. n_k is the set of the quantum numbers $k = 1, \dots, n$. The conditions of quasi-classicity $n_k \gg 1$ are assumed to be satisfied. By replacing the action variables I_k by the operators $i^{-1} \partial/\partial\psi_k$ one obtains the Schrödinger equation

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S/056/62/043/001/013/056
B125/B102

Quasi-classical wave function ...

$$E \left(\frac{1}{i} \frac{\partial}{\partial \varphi_k} \right) \Psi_{(n_k)}^0 = E_{(n_k)}^0 \Psi_{(n_k)}^0 \quad (1)$$

in the variables of action and angle. The perturbed wave function is given by

$$\begin{aligned} E \left(\frac{1}{i} \frac{\partial}{\partial \varphi_k} \right) U_{(n_k)} \Psi_{(n_k)}^0 + V \left(\varphi_k, \frac{1}{i} \frac{\partial}{\partial \varphi_k} \right) U_{(n_k)} \Psi_{(n_k)}^0 &= \\ = [E_{(n_k)}^0 + \Delta_{(n_k)}] U_{(n_k)} \Psi_{(n_k)}^0, \end{aligned} \quad (2)$$

where $U_{(n_k)} \Psi_{(n_k)}^0$ is the perturbed wave function, and $\Delta_{(n_k)}$ is the shift of the level characterized by the numbers n_k . In the quasi-classical approximation, n_k is substituted for $i^{-1} \partial / \partial \varphi_k$ in $V(\varphi_k, i^{-1} \partial / \partial \varphi_k)$. When determining the correction to the wave function corresponding to the level n_k , one restricts oneself to the linear term in the expansion of $E(\hat{I}_k)$ into a power series of $(\hat{I}_k - n_k)$. Thus, one obtains the perturbed wave function

Card 2/4

Quasi-classical wave function ...

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B125/B102

$$\Psi_{(n_k)}(x_k) = \int U_{n_k}(\varphi_k) \Psi_{n_k}^0(\varphi_k) f_{\varphi_k}(x_k) d\varphi_1 \dots d\varphi_N. \quad (9)$$

in x-representation with the transition matrix

$$f_{\varphi_k}(x_k) = \sum_{n_1 \dots n_N} \Psi_{n_k}^0(\varphi_k) \Psi_{n_k}^0(x_k). \quad (8)$$

and with

$$U_{(n_k)} = \exp \left(\frac{i\Delta_{(n_k)}}{N} \sum_k \frac{\varphi_k}{\omega_k} \right) \exp \left[i \int_0^{t_0} V(\varphi_k + \omega_k t) dt \right], \quad (5),$$

where t_0 is the root of the equation $V_k(\varphi_k + \omega_k t_0) = 0$. The Fourier components of the function $V(\varphi_k, n_k)$ correspond to the known expression for the matrix elements calculated by means of quasi-classical wave functions. The range of application of the results obtained is limited by the condi-

Card 3/4

Quasi-classical wave function ...

S/056/62/043/001/013/056
B125/B102

tion $(V/E)(ka)^{2/3} \leq 1$, $ka \sim n$, but is larger than that of perturbation theory.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Radiophysics and Electronics of the Siberian Department of the Academy of Sciences USSR)

SUBMITTED: October 17, 1961

Card 4/4

24.7000

39483

S/056/62/043/002/017/053
B102/B104AUTHOR: Chaplik, A. V.TITLE: Non-adiabatic transitions on intersection of molecular terms
of identical symmetryPERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 45,
no. 2(8), 1962, 462 - 464

TEXT: Within the framework of the adiabatic perturbation theory formulas are deduced for the transition probabilities P in special cases of intersection and pseudo-intersection of electron terms of identical symmetry. S. S. Gershteyn and V. D. Krivchenkov (ZhETF, 40, 1491, 1961) have shown that the electron terms in the field of two different Coulomb centers may intersect and that intersection occurs only in the case of Coulomb interaction. P is calculated using the Landau-Zener formula

$$P = 2 \exp\left(-\frac{\pi\Delta^2}{2|a|v}\right) \left[1 - \exp\left(-\frac{\pi\Delta^2}{2|a|v}\right)\right], \quad a = \frac{d\omega}{dR}|_{R_c} \quad (1)$$

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S/056/62/043/002/017/053
B102/B104

Non-adiabatic transitions on ...

and partly following Zener's way of calculation (Proc. Roy. Soc., A137, 696, 1932) with the only exception that the transition probability with a single transition of the intersection point (R_c) equals $|a_1(+\infty)|^2$; Zener has taken $1 - |a_1(+\infty)|^2$. The total transition probability during collision is $P = 4\pi\nu^2v/|a|\sim\alpha$ (intersection) or

$$P = 2 \exp\left(-\frac{\pi\Delta^2}{2|a|v}\right) \left[1 - \exp\left(-\frac{\pi\Delta^2}{2|a|v}\right)\right] + \frac{4\pi\nu^2v}{|a|} \exp\left(-\frac{\pi\Delta^2}{|a|v}\right). \quad (10)$$

(pseudo-intersection, i.e., intersection of unperturbed terms). Δ is the divergence of the terms $\alpha = (\omega T)^{-1}$, ω is the characteristic frequency, T is the collision time, v is the particle velocity, the constant $\nu \sim \lambda/R_0$, R_0 is the characteristic dimension of $\omega(R)$; $R = v$. There is 1 figure.

ASSOCIATION: Institut radiotekhniki i elektroniki Sibirsogo otdeleniya Akademii nauk SSSR (Institute of Radio Engineering and Electronics of the Siberian Department of the Academy of Sciences USSR)

Card 2/3

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

Non-adiabatic transitions on ...

S/056/62/043/002/017/053
B102/B104

SUBMITTED: December 14, 1961

J

Card 3/3

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

24 4460
 S/056/62/043/003/025/063
 B102/B104

AUTHORS: Dykhne, A. M., Chaplik, A. V.

TITLE: Theory of inelastic atomic collisions

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
 no. 3(9), 1962, 889-892

TEXT: The authors deduce the well-known Landau-Zener formula for the transition probability in inelastic collisions (Proc. Roy. Soc. A137, 696, 1932), in adiabatic perturbation-theoretical approximation. They then generalize this formula for a broader range of the perturbation parameter Δ/ω and the adiabatic parameter $1/\omega T$, where T is of the order of the collision time. VC

$$P = 2e^{-\alpha_0/2} (1 - e^{-\alpha_0/2}); \quad \alpha_0 = 1 \int_{R_0}^{R_\infty} \omega(R) \frac{dR}{\sqrt{1 - p^2/R^2}}. \quad (15)$$

is obtained for the total transition probability. For $\Delta/\omega_0 \ll (\omega_0 T)^{-1/3}$

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Theory of inelastic atomic ...

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B102/B104

(15) goes over into the Zener formula. $\omega(R)$, a difference of exact terms, includes all perturbations; $\omega(R_0)=0$. (15) is valid for any Δ/ω_0 and for $(\omega_0 T)^{-1} \ll 1$. From (15) it follows that throughout the range in which adiabatic approximation can be applied the cross section as a function of the velocity has only one maximum.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Radiophysics and Electronics of the Siberian Department of the Academy of Sciences USSR)

/ SUBMITTED: November 23, 1961

Card 2/2

KYKHNE, A.M.; CHAPLIK, A.V.

Theory of inelastic atomic collisions. Zhur. eksp. i teor. fiz. 43 no.3:
889-892 '62. (MIRA 15:10)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya AN SSSR.
(Collisions (Nuclear physics))

KOVNER, M.A.; CHAPLIK, A.V.

Vibration-rotation interaction in the benzene molecule and the line width of its Raman spectrum. Opt.i spektr. 13 no.1:56-62 Jl '62.
(MIRA 15:7)
(Benzene--Molecular rotation) (Raman effect)

CHAPLIK, A.V.

Quasi-classical wave function of a system with many degrees of freedom. Zhur. eksp. i teor. fiz. 43 no.1:84-86 J1 '62.

(MIRA 15:9)

1. Institut radiofiziki i elektroniki Sibirskogo otdeleniya
AN SSSR.

(Wave mechanics)

CHAPLIK, A.V.

Nonadiabatic transitions in intersections of molecular terms of identical symmetry. Zhur. eksp. i teor. fiz. 43 no.2:462-464 Ag '62. (MIRA 16:6)

1. Institut radiotekhniki i elektroniki Sibirskogo otdeleniya AN SSSR.
(Quantum theory) (Probabilities)

ACCESSION NR: AP4000076

S/0056/63/045/005/1518/1522

AUTHOR: Chaplik, A. V.

TITLE: Quantum transitions into a continuous spectrum as a result
of adiabatic perturbations

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 5, 1963; 1518-
1522

TOPIC TAGS: adiabatic perturbation, quantum transition, transition probability, quantum transition probability, continuous spectrum transition, continuum transition, transition into continuum, transition into continuous spectrum, time dependent Hamiltonian

ABSTRACT: The transition probabilities are determined for a system described by a Hamiltonian which depends parametrically on the time t , and which is in some state of the discrete spectrum at $t = -\infty$ and then goes over into a state with positive energy at $t = +\infty$. The transition occurs as a result of an adiabatic perturbation. The calculations are carried out accurate to a numerical factor. An analog-

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ACCESSION NR: AP4000076

gous estimate is presented for the case of atomic collisions such as the decay of negative ions in slow collisions. "The author is grateful to A. M. Dykhne and V. L. Pokrovskiy for valuable remarks and a discussion of the work." Orig. art. has: 18 formulas.

ASSOCIATION: -Institut radiofiziki i elektroniki Sibirskogo otdele-niya Akademii nauk SSSR (Institute of Radiophysics and Electronics, Siberian Branch, Academy of Sciences SSSR)

SUBMITTED: 07May63

DATE ACQ: 05Dec63

ENCL: 00

SUB CODE: PH

NO REF SOV: 003

OTHER: 001

Card 2/2

ACCESSION NR: AP4042380

S/0056/64/047/001/0126/0133

AUTHOR: Chaplik, A. V.

TITLE: Quantum transitions to a continuous spectrum, induced by an adiabatic perturbation. II

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 126-133

TOPIC TAGS: quantum theory, continuous spectrum, adiabatic process, perturbation, atomic spectrum

ABSTRACT: This is a continuation of earlier work (ZhETF v. 45, 1518, 1963), except that the analysis is not confined to zero angular momentum. It is shown that, unlike the preceding case, the results of the analysis depends on the details of the potential. The dependence of the probability of transition into a continuous spectrum on the energy and on the adiabaticity parameter is determined. Particular attention is paid to the most frequently encountered po-

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ACCESSION NR: AP4042380

tential, which decreases like $1/r$ at infinity, where the discrete spectrum contains an infinite number of levels that condense towards the boundary of the continuum. It is pointed out that the results obtained cannot be applied directly to calculations of atomic collisions, since the assumption of spherical symmetry of the perturbation is not satisfied. "The author is grateful to V. M. Galitskiy who pointed out the singularities of the problem at nonzero values of the angular momentum, and the need for special analysis in this case." Orig. art. has: 34 formulas.

ASSOCIATION: Institut radiofiziki i elektroniki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Radio Physics and Electronics, Siberian Department, Academy of Sciences, SSSR)

SUBMITTED: 20Sep63

ENCL: 00

SUB CODE: NP

MR REF Sov: 003

OTHER: 001

2/2

L 9255-66	EWT(1)/T/EWA(h)	IJP(c)	GG/AT
ACC NR:	AP5022721	SOURCE CODE:	UR/0181/65/007/009/2768/2771
AUTHOR:	Baklanov, Ye. V.; Chaplik, A. V.		54 B
ORG:	Institute of Physics of Semiconductors SO AN SSSR, Novosibirsk (Institut fiziki poluprovodnikov SO AN SSSR)		
TITLE:	Dielectric constant in the two-band model for a semimetal		
SOURCE:	Fizika tverdogo tela, v. 7, no. 9, 1965, 2768-2771		
TOPIC TAGS:	dielectric constant, semiconductor band structure, theoretic physics		
ABSTRACT: The dielectric constant is calculated for the two-band model of a semi-metal proposed by Keldysh and Kopayev (L. V. Keldysh, Yu. V. Kopayev, FTT, 6, 2791, 1964). The problem consists of finding the vertex part $\Gamma(q,\omega)$ for the case of a degenerate electron-hole plasma with identical densities n of electrons and holes. A formula is derived for $\Gamma(q,\omega)$ and used as a basis for calculating ϵ in various regions of the energy spectrum. In conclusion we thank V. L. Pokrovskiy for discussing the work. Orig. art. has: 1 figure, 16 formulas. 99,55			
SUB CODE:	20/	SUBM DATE:	09Apr65/ ORIG REF: 002/ OTH REF: 000
Card 1/1 DW			

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

CHAPLIK, N.A. (Moskva).

Ergometer attached to both legs. Ekip. Khir. 3 no. 6:53-54 K-D '58.
(DYNAMOMETER) (MIRA 12:1)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

CHAPLIK, M.A.

Respiratory function in patients with tuberculosis subjected to
the operation of extrapleural pneumolysis. Sov. med. 25 no.4:83-89
Ap '62. (MIRA 15:6)

1. Iz Moskovskogo gorodskogo tuberkuleznogo gospitalya dlya
invalidov Otechestvennoy voyny (nachal'nik S.I. Dvorman;
nauchnyye rukovoditeli: doktor.med.nauk Ye.N. Domontovich
i prof. T.N. Khrushcheva).

(RESPIRATION)

(TUBERCULOSIS)

(PLEURA---SURGERY)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

SPOKOYNYY, Yu.Ye., inzh.; VAYNER, A.L., inzh.; CHAPLIK, Z.M., inzh.

Semiconductor thermostat for radioelectronic systems. Khol. tekhn.
i tekhn. no.1:16-18 '65.

(MIRA 18:9)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

TERESHIN, O.N.; CHAPLIN, A.F.

Inverse electrodynamic problem applicable to a symmetrically excited impedance cylinder. Nauch.dokl.vys.shkoly; radiotekh. i elektron.
no.2:51-57 ' 58. (MIRA 12:1)

1. Kafedra antennykh ustroystv i rasprostraneniya radiovoln Moskovskogo energeticheskogo instituta.
(Impedance (Electricity))

L 17299-63 Pg-1 EWT(d)/EWT(1)/FCC(w)/BDS/ES(w)-2 AFFTC/ASD/ESD-3/SSD/IJP(C)

ACCESSION NR: AP3004845

S/0141/63/006/003/0585/0590

68
65

AUTHOR: Chaplin, A. F.

TITLE: Exciting an impedance strip on an infinite screen

SOURCE: IVUZ. Radiofizika, v. 6, no. 3, 1963, 585-590

TOPIC TAGS: impedance strip, variable impedance

ABSTRACT: An approximate method of calculation is described of a finite plane variable-surface-impedance structure (strip) placed on an infinite screen. The strip is excited by arbitrarily-distributed sources. By means of Green's functions for a half-space, integral equations are written for the functions of distribution of electric and magnetic currents on the strip surface. These equations are replaced by a set of linear algebraic equations (Krylov-Bogolyubov's method) and solved using linear approximations for evaluating integrals of Hankel functions and asymptotic representation of Hankel functions through logarithms.

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L 17299-63

ACCESSION NR: AP3004845

3

Calculations were carried out on a computer. Results for strips with constant, linearly-variable, and harmonically-variable impedance are given. The solution method is held expedient for those strips having widths up to $(8-10)\lambda$ only. "In conclusion, the author wishes to thank G. T. Markov and Ye. N. Vasil'yev for their assistance in the work." Orig. art. has: 5 figures and 13 formulas.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power-Engineering Institute)

SUBMITTED: 26Jul62

DATE ACQ: 27Aug63

ENCL: 00

SUB CODE: PH

NO REF SOV: 004

OTHER: 001

Card 2/2

FROLOV, A.G., doktor tekhn. nauk; TRAYNIS, V.V., kand. tekhn. nauk;
PSHENICHNYY, I.D., inzh.; CHAPLIN, B.N., inzh.

Hydraulic haulage of lump coal in a stream of coal slurry. Ugol'
34 no.6:5-9 Je '59.
(Hydraulic mining) (Mine haulage)

(MIRA 12:8)

CHAPLIN, B.N., gornyy inzhener

Determination of the parameters of hydraulic transportation with
pressure of semi-crystalline rocks. Nauch. trudy MGI no.36:
123-130 '61. (MIRA 17:3)

CHAPLIN, B.N., kand. tekhn. nauk; MEDNIKOV, N.N., gornyy inzh.

Optimal size of crushing for the hydraulic conveying of
original rock in strip mines. Gor. zhur. no.5:22-25 My '64.
(MIRA 17:6)

1. Moskovskiy institut radioelektroniki i gornoj elektromekhaniki.

SHILYAYEV, M.; PLAVIN, B., inzh.; CHERTEKOV, N.; CHARKIN, P.; BURNAZYAN, G.; MIKHAYLIK, P.; GONCHAROV, A.; CHAPLIN, I., inzhener-tehnolog; KROPOTIN, N., starshiy tekhnolog

Around the country. Izobr.i rats. no.6:32-33. Je '59.
(MIRA 12:9)

1. Predsedatel' soveta Vsesoyuznoy organizatsii izobretateley i ratsionalizatorov stankostroitel'nogo proizvodstva, g. Izhevsk (for Shilyayev).
2. TSentral'nye byuro tekhnicheskoy informatsii g. Vil'nyus (for Plavin).
3. Sekretar' soveta Vsesoyuznoy organizatsii izobretateley i ratsionalizatorov Adzharskoy ASSR, g. Batumi (for Chertkov).
4. Chlen Yaroslavskogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Charkin).
5. Sekretar' Arwyanskogo respublikanskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, g. Yerevan (for Burnazyan).
6. Chlen prezidiuma L'vovskogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Mikhaylik).
7. Predsedatel' zavodskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, g. Leningrad (for Goncharev).
8. Novo-Kramatorskiy mashinostroitel'nyy zavod, g. Kramatorsk (for Cahplin).
9. Izhevskiy mashinostroitel'nyy zavod, g. Izhevsk (for Kropotin).

(Efficiency, Industrial)

AUTHOR:

Chaplin, I.F.

SOV/117-58-12-10/36

TITLE:

The Machining of Non-Circular Surfaces (Obrabotka nekruglykh poverkhnostey)

PERIODICAL:

Mashinostroitel', 1958, Nr 12, p 14 (USSR)

ABSTRACT:

P.M. Ushkalo, Chief Engineer-Technologist and V.N. Zaytsev, Engineer-Designer from the Novo-Kramatorskiy mashinostroitel'-nyy zavod (Novo-Kramatorskiy Machine Building Plant) designed and brought into use an installation for machining non-circular surfaces for wedgeless joints. The mating parts are connected on a non-circular cylindric or conic surface. The advantage of the wedgeless joining over wedge or spline joints are: 1) better centering of the parts; 2) lack of acute angles, grooves and sharp changes of cross sections, thus reducing stress concentration; 3) the surfaces can be finished like ordinary round shafts. The simplest and latest method for machining non-circular shafts is turning on a special lathe where the cutter moves in a rotary and forward direction. The new method makes it possible to strengthen the connection of gears and shafts and reduce the weight of the machine. There are 2 diagrams.

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"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

CHAPLIN, I.F.

Rotary riveting. Mashinostroitel' no.1:43 Ja '59.

(MIRA 12:2)

(Rivets and riveting)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

SOV/122-59-2-21/34

AUTHOR: Chaplin, I.F.

TITLE: New Accessories (Novyye prispes obleniya)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, pp 59~60 (USSR)

ABSTRACT: 1. Device for surfacing flat surfaces

A portable grinding attachment is illustrated (Fig 1) with a vertical spindle air operated grinding wheel arranged in a holding frame with a tiltable base and guide plate. The grinding wheel can be finely adjusted to contact the surface being machined by means of a worm and helix feed. Wear of the grinding wheel can be compensated by depressing a spring loaded knob which rotates the feed worm fractionally by means of a rack and pinion and ratchet mechanism.

2. Pneumatic vice with rapid adjustment for dimension

Fig 2 illustrates a clamping device with an adjustable jaw on a ratchet which can change the swallow of the vice from 0 to 35 mm. The opposite jaw is loaded by an air piston operating through a bell crank which enables

Card 1/2

SOV/122-59-2-21/34

New Accessories

a clamping force of up to 4,500 kg to be obtained with 5 kg/cm² air pressure. Fig 3 illustrates a control valve incorporating a reducer enabling lower clamping pressures to be obtained. There are 3 figures.

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18(5)

SOV/128-59-3-29/31

AUTHOR: Chaplin, I.F., Engineer

TITLE: Non-Aqueous Black Mold Dressing

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 3, p 48 (USSR)

ABSTRACT: In the mold casting department of the ~~Novo-Bremenetskiy~~
~~metallurgical plant~~ non-aqueous mold dressing has
been used with great success. It is used for the molds
and as an admixture for the sodium silicate (15% gra-
phite blackening, 25% tallow, 2% fixing agent P, 5%
bakelite powder, 53% methylated spirits). This non-
aqueous wash obviated drying and shortens the mold
forming process for one complete shift

Card 1/1

AUTHOR: Chaplin, I.F.

SOV/122-59-5-24/32

TITLE: The Machining of Flats on a Lathe (Obrabotka graney na tokarnom stanke)

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 5, p 69 (USSR)

ABSTRACT: A lathe attachment is illustrated developed in the Tool Shop of the Novo-Kramatorskiy Engineering Works (Novo-Kramatorskiy mashinostroitel'nyy zavod) designed to machine the flats of squares or hexagons on a lathe without a dividing head. The attachment is mounted on a lathe faceplate and consists of a body carrying, in taper roller bearings, a cutter spindle at a given radial distance from the lathe spindle centre. The cutter spindle mounts a cutter head and is driven by a pinion meshing with an internal gear which is centred on the lathe spindle and held stationary by attachment to the lathe bed. The cutter head has three equally spaced cutters to machine hexagons or two cutters to machine squares. Each cutting tool so arranged performs an oval motion, of which the flat sides form the hexagon or square. The workpiece is clamped in a chuck mounted on an angle

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The Machining of Flats on a Lathe

SOV/122-59-5-24/32

fixture attached to the lathe bed. The body of the attachment as shown carries another tool for turning a diameter adjacent to the hexagon or square. There are 2 figures.

Card 2/2

CHAPLIN, I.P., insh.

Chuck for cutting small screw threads. Mashinostroitel'
no.3:16 Nr. '60. (MIRA 13:6)
(Screw-cutting machines--Attachments)

CHAPLIN, N. M.

Pashenkov, Ya. M., Chaplin, N. M. and Gribenov, I. P. - "Natural features and the division into districts of individual areas of the Kazakh SSR for agricultural water supply according to the character of water springs." Trudy (Vsesoyuz. nauch.-issled. in-t gidrotekhniki i melioratsii), Vol. XXV, Issue 2, 1948, p. 3-44, with map

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

CHAPLIN, N. M.

Chaplin, N. M. and Datsikov, V. V. - "Water supply for animal husbandry in Kara-Kum, Turkmen SSR," Trudy (Vsesoyuz. nauch.-issled. in-t gidrotekhniki i melioratsii), Vol. XXV, Issue 2, 1948, p. 100-22

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

CHAPLIN, V.I.; YAKOVLEVA, I.Ya.

Stroboscopy of children in a boys' choir. Nov. med. tekh.
no. 2:41-44 '64. (MIRA 18:11)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

CHAPANOV, TS.

Weather forecasts. Nauka i tekhnika mladenzh 15 no.10: 7-9 0'63.

CHAPLIN, V.

Characteristics of the transportation of molasses in tank vessels.
Mor.flot.21 no.5:9-10 My 161. (MIRA 14:5)

1. Kapitan tchker "Grodno" Chernomorskogo parokhodstva.
(Molasses—Transportation)

L 5297-66 EWT(m)/EPP(c)/EWP(j)/T RM
ACC NR: AP5025033

SOURCE CODE: UR/0286/65/000/016/0083/0083

AUTHORS: Verkhorubov, B. A.; Fridman, A. N.; Olerinskii, B. I.; Monakhova, Ye.
V. V.; Chaplin, Yu. V.; Petrova, L. V.; Vavilova, I. I.

ORG: none

TITLE: A method for obtaining polyolefin. Class 39, No. 173945

SOURCE: Byulleten' izobreteni i tovarnykh znakov, no. 16, 1965, 83

TOPIC TAGS: polyolefin, monomer, organometal, catalyst

ABSTRACT: This Author Certificate presents a method for obtaining polyolefin by high-pressure circulation of gaseous monomer through a polymerizer filled with a solvent and an active complex, and containing an organometallic catalyst. To prevent polyolefin, formed in the early stage of the reaction, from sticking to the walls of the polymeriser, the latter is first filled with pure solvent. The active complex is then added to the solvent.

CDS CODE: MT, CC/ SUBN DATE: 23Jan63/ ORIG REF: 000/ OTH REF: 000

Card 1/1 PC

END: 678.742

090/0602

38061
S/170/62/000/006/009/011
B117/B138

24.5200

AUTHOR: Chaplina, A. I.

TITLE: Application of the regular conditions method to study the heat transfer of a plate in forced turbulent flow

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, no. 6, 1962, 88 - 92

TEXT: To determine the accuracy of the regular conditions method the heat transfer was studied for a plate in a forced turbulent air flow in longitudinal direction. An apparatus similar to that of earlier experiments (IFZh, no. 3, 1962) was used, but the working part was modified, the calorimeters being replaced by a two-layer rubber plate. The test conditions were similar to those of the stationary method. Experimental results

showed 5 % deviation from the curve described by $\bar{a}_k = 3.84 u^{0.8} l_0^{-0.2}$ (\bar{a}_k is the heat transfer coefficient of convection; u is the velocity of flow; l_0 the length of the heatable part of the plate). The local values of the heat transfer coefficient determined by the stationary method under the same conditions are described by the equation

Card 1/2

Application of the regular ...

S/170/62/000/006/009/011
B117/B138

$\bar{\alpha}_k = 3.96 u_0^{0.8} l_0^{-0.2}$, converted (by graphical integration) to its mean values. The equations show that the results of the two methods differ by less than 5 %. The experimental data given in index form are expressed by the relation $\bar{N}_u = 0.0276 \bar{R}e_0^{0.8}$, which differs by 15 % from the general relation for the heat transfer of a plate in a turbulent air flow. $\bar{N}_u = 0.032 \bar{R}e^{0.8}$. The lower value found by the regular conditions method for the general (longitudinally mean) heat transfer coefficient $\bar{\alpha}$ may have two causes: the dependence of $\bar{\alpha}$ on the temperature head and the degree of roughness of the material used for the model. Taking account of these factors, the method suggested is suitable for determining the mean heat transfer coefficient and is not less accurate than the stationary method. There are 2 figures.

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk (Power Engineering Institute AS BSSR, Minsk)

SUBMITTED: January 3, 1962
Card 2/2

34339
S/170/62/005/003/002/012
B154/B102

26.5.200

AUTHOR:

Chaplina, A. I.

TITLE: Influence of initial section of hydrodynamic stabilization on the heat exchange of a plate

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 3, 1962, 21 - 26

TEXT: The author studies the heat exchange of initially unheated sections of different lengths of a plate that is by-passed by a forced turbulent air flow. The experiments were carried out in a closed aerodynamic tube with octangular cross-section (Ref. 9: G. T. Sergeyev IFZh No. 5, 1961). The plate contains 12 copper water calorimeters, four of which are used in the experiments, and is shown in Fig. 1. To study the heat transfer at several points on the plate, the coefficient of local heat transfer $\alpha_k = f(u,x)$ is determined for 3 values of x , u varying between 4 and 16.5 m/sec at 60, 70, 80 and 100°C. x is the distance between one end of the plate and the measuring point on the plate, and u is the flow velocity. The distance $x_0 = 0.01$ m between the beginning of the heated section and the respective

Card 1/1 3

Influence of initial section...

S/170/62/005/003/002/012
B154/B102

measuring point is always the same. In the present case the Reynolds numbers are between $6 \cdot 10^4$ and $4 \cdot 10^5$ for x and between $2 \cdot 10^3$ and $2 \cdot 10^5$ for x_0 . After introducing the ratio x_0/x which is between 0.02 and 0.373 the following relations are obtained:

$$Nu_0 = 0.0257 Re_x^{0.8} Pr^{0.33} (x_0/x)^{0.8} \quad (13)$$

or

$$Nu_0 = 0.026 Re_{x_0}^{0.8} Pr^{0.33} \text{ for air} \quad (14)$$

which corresponds to a plate heated along its whole length. The experimental values obtained deviate from (13) and (14) by 9% and 8%, respectively. The relations are in agreement with the results of other authors. There are 3 figures, 1 table, and 9 references: 4 Soviet and 5 non-Soviet. The four most recent references to English-language publications read as follows: Maisel D. and Sherwood T. Chemical Engineering Progress, 46, 131, 1950.; Tessin W. and Jakob M. Transaction of the ASME, 75, 473, 1953; White and Churchill R. AIChE Journal, 5, 354, 1959.; Eichhorn R., Eckert

Card 2/ *3* *X*

Influence of initial section...

S/170/62/005/003/002/012
B154/B102

E. and Anderson A. WADC TR 58-33, July 1958.

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk (Institute of Power Engineering AS BSSR, Minsk)

SUBMITTED: November 11, 1961

Fig. 1. Model of the plate for investigating the heat transfer: 1-working surfaces of the calorimeters (copper); 2-side surfaces of the calorimeters (steel) with guidings; 3-surfaces of the thermocouples; 4-calorimeters; 5-lining; 6-frame of the plate; 7, 8-details of plate strengthening; the points for measuring the temperature on the surface of the plate are marked with a cross. I, II, III, IV-working calorimeters (the rest serves for shielding).

Card 3/4 3

X

38603

S/170/62/005/007/004/010

B104/B112

24.5200AUTHOR: Chaprina, A. I.

TITLE: Experimental study of heat transfer along a streamlined plate

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 1, 1962, 34-38

TEXT: The heat-exchange coefficients of a plate 250 by 500 mm, along which a forced turbulent airstream flowed, were determined at four points using water calorimeters. The flow velocity varied from 4 to 16.5 m/sec, the temperature of the airstream was 60, 70, 80, or 100°C, and that of the plate surface 37°C. The local heat-exchange coefficients can be expressed as a function of the plate length x_0 by $\alpha_k = 3.3u^{0.8}x_0^{-0.2}$, where u denotes the flow velocity. If the results are presented in the form

$Nu = CRe^{0.8}$, then $C = 0.0235$. The value of C is 8% less than the values published earlier (S. Seca and F. Sauer, Trans. ASME, 74, 1251, New York, 1952; B. S. Petukhov, et al., ZhTF, 24, no. 10, 1954; R. Seban, D. Doughty, Trans. ASME, 78, 217, New York, 1956; R. Eichkorn et al., WADC, TR 58-33, Minneapolis, July 1958). There are 2 figures and 1 table.

Card 1/2

Experimental study of heat transfer ...

S/170/62/005/005/004/010
B104/B112

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk
(Institute of Power Engineering AS BSSR, Minsk)

SUBMITTED: January 25, 1962

Card 2/2

CHAPLINA, A.I.

Criterions of the regularity of thermal conditions in case of various methods of the heating of solids. Inzh.-fiz.znmr. 5 no.9:118-125 S '62. (MIRA 15:8)

1. Energeticheskiy institut AN BSSR, Minsk.
(Solids—Thermal properties)

TERESHCHUK, Romual'd Mikhaylevich, inzh.; DOMERUGOV, Rem
Matveyevich, kand. tekhn. nauk; BOSSY, Nikolay
Dmitriyevich, kand. tekhn. nauk; NOGIN, Samuil Isaakovich,
inzh.; BOROVSKIY, Vadim Pavlovich, inzh.; CHAPLINSKIY,
Avraam Borisovich, kand. tekhn. nauk; BEREZOVSKIY, M.A.,
inzh., retsenzent

[Radio amateur's handbook] Spravochnik radioliubitelia.
Kiev, Tekhnika, 1965. 1159 p. (MIRA 18:10)

MEL'NIKOV, G.B.; BEN'KO, K.I.; CHAPLINA, A.M.; ZBITSKAYA, N.V.

Hydrobiological features of ponds in Dnepropetrovsk Province and the
nutrition of young carp. Trudy prebl.i tem.sev.no.1:39-48 '51.(MIRA 9:7)
(Dnepropetrovsk Province--Fresh water biology)(Dnepropetrovsk Province--
Carp)

CHAPLINA, A.M., Cand Biol Sci -- (diss) "Ecology
of raising the young carp and growth intensification / its)
in fishery southeast Ukraine." Dnepropetrovsk, 1958,
18 pp (Min of Higher Education UkrSSR. Dnepropetrovsk
State Univ im 300th Anniversary of the Reunification of
the Ukraine ~~with~~ Russia) 150 copies (KL, 29-58, 130)

ZHURAVEL', P.A.; MEL'NIKOV, G.B.; CHAPLINA, A.M.

Outlook for the acclimatization of the reach (*Mutilus rutilus heckeli* (Nordmann) in southern reservoirs in relation to the nature of its feeding habits. Vop. ikht. no.10:127-130 '58. (MIRA 11:10)

1. Dnepropetrovskiy institut gidrobiologii Universiteta im. 300-letiya vossevedineniya Ukrayny s Ressiyey.
(Russia, Southern—Reach (Fish))

ZHURAVEL', P.A.; MEL'NIKOV, G.B.; CHAPLINA, A.M.

Significance of the bream *Abramis ballerus* for fishery in a number
of reservoirs in connection with the nature of its food [with summary
in English]. Zool. zhur. 37 no.8:1256-1257 Ag '58. (MIRA 11:9)

1. Nauchno-issledovatel'skiy institut hidrobiologii Dnepropetrovskogo
gosudarstvennogo universiteta.
(Bream)

ANTSYSHKINA, L.M.; CHAPLINA, A.M.

Ligula infestations in fishes of the Ukrainian steppe reservoirs
and measures for their control. Nauch. dokl. vys. shkoly; biol.
nauki no.1:13-15 '60. (MIRA 13:2)

1. Rekomendovana Nauchno-issledovatel'skim institutom hidrobiologii Dnepropetrovskogo gosudarstvennogo universiteta im. 300-letiya
vostochnykh sosedstv Ukrayiny i Rossiyey.

(Ukraine--Cestoda) (Parasites--Fishes)

CHAPLINA, A.M., nauchnyy sotrudnik; ANTSYSHKINA, L.M.

Parasite fauna of fishes of the middle Dnieper system in the
Kremenchug-Dneprodzerzhinak section. Vest. Dnep. nauch.-issl.
inst. hidrobiol. 12:241-252 '60. (MIRA 14:12)

(Dnieper River--Parasites)
(Parasites--Fishes)

CHAPLINA, A.M. [Chaplina, O.M.]

Material on the parasites of fish in small rivers of the northern
Azov region. Dop. AN URSR no. 2:247-250 '61. (MIRA 14:2)

1. Institut hidrobiologii Dnepropetrovskogo gosudarstvennogo universi-
teta. Predstavлено академиком АН USSR A.P. Markevichem.
(Azov Sea region—Parasites—Fishes)

CHAPLINA, A.M.; YARMOSHENKO, N.P.

Food selectivity of young carp in the bodies of water of the steppe
and wooded steppe zone of the Ukraine. Vop. ekol. 5:239-240 (62.
(MIRA 16:6)

1. Institut hidrobiologii Dnepropetrovskogo universiteta i Kiyevskiy
institut hidrobiologii AN UkrSSR.
(Ukraine--Carp) (Ukraine--Fishes--Food)

MEL'NIKOV, G.B.; CHAPLINA, A.M.

Raising different species of fishes in the same pond as a method for increasing the productivity of ponds and small reservoirs in the steppe zone of the Ukrainian S.S.R.
Trudy sov. ikht. kom. no.14:74-76 '62. (MIRA 15:12)

1. Nauchno-issledovatel'skiy institut gidrobiologii
Dnepropetrovskogo universiteta.
(Ukraine—Fish culture)

MEL'NIKOV, G.B.; CHAPLINA, A.M.

Introduction of the Lake Sevan trout (*Salmo ischchan Kessler*) into
Crimean water reservoirs. Nauch. dokl. vys. shkoly; biol. nauki
no.3:28-30 '63. (MIRA 16:9)

1. Rekomendovana kafedroy hidrobiologii Dnepropetrovskogo
gosudarstvennogo universiteta im. 300-letiya vossoyedineniya
Ukrainy s Rossiyey.
(Crimea--Trout) (Fish introduction)

MEL'NIKOV, G.B.; CHAPLINA, A.M.

Ichthyofauna and prospects of using Kal'mius and Gruzskiy
Yelanchik Rivers for fish farming. Gidrobiol. zhur. 1 no.2:
43-47 '65. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut hidrobiologii Dnepro-
petrovskogo gosudarstvennogo universiteta.

SEMENOVA, A.S.; PARAMONOV, Ye.Ya.; FEDOTOV, B.G.; COL'DENBERG,
A.L.; IL'CHENKO, P.A.; CHAPLINA, A.M.; SKURIKHINA, V.S.;
SAZHIN, B.I.; MATVEYEVA, Ye.N.; KOZOLA, A.A.; DYN'KINA,
G.M.; SIROTA, A.G.; RYBIKOV, Ye.P.; GERBILSKIY, I.S.;
SHCHUTSKIY, S.V., red.; SHUR, Ye.I., red.

[Medium pressure polyethylene] Polietilen srednego davleniya.
Moskva, Khimiia, 1965. 89 p. (MIRA 18:7)

1. Nauchno-issledovatel'skiy institut polimeratsionnykh
plastmass (for all except Shchutskiy, Shur).

ACCESSION NR: AP6043771

S/0080/64/037/008/1835/1837

AUTHOR: Chaplina, I.M.TITLE: The system ZnO-V₂O₅ and the luminescent properties of zinc vanadates.SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 8, 1964, 1835-1837TOPIC TAGS: zinc, vanadate, liquidus line, pyrovanadate, metavanadate, liquidus curve

ABSTRACT: The purpose of this paper is to explain the phase correlation with the system ZnO-V₂O₅ as well as a preliminary investigation of the dependencies of luminescent properties of zinc vanadates on the phase composition. The initial substance used in this work was ZnO of the "for luminofores" brand and V₂O₅ of a chemically pure brand. The oxide mixtures were ground thoroughly in an agate mortar and then pressed into 0.8g tablets which were in turn tempered in to open air at 550°C over a period of 30 hours. These tablets were then analyzed by X-ray. X-rays were taken with the URS-I-50 machine. CuK_α-radiation was used. The author concluded that it was established by X-ray that the ZnO-V₂O₅ system contains a phase the composition of which is close to zinc metavanadate, pyrovanadate and zinc orthovanadate. The existence of a phase the composition of which is close to

Cord 1/2

ACCESSION NR: AP4043771

metavanadate and zinc pyrovanadate was confirmed thermographically. A maximum brightness of luminescence was observed at a content of ZnO 75 mol. %, i.e., it corresponds to zinc orthovanadate. Orig. art. has: 2 figures

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: 04Nov62

ENCL: 00

SUB CODE: IC, OP

NO REF Sov: 000

OTHER: 002

Card 2/2

NURMUKHAMEDOV, R.N.; TIMOFEYUK, G.N.; CHAPLINA, I.M.; NAGORNAYA, L.L.

Spectroscopic study of dianthrilethylenes. Zhur. fiz. khim. 38
no.10:2465-2469 O '64. (MIRA 18:2)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.

KANDROV, I.S., CHAPLINA, K.A.

Rhythm of the menstrual cycle in women in the Arctic. Akush. i
gig. 33 no.2:69-73 Mr-Ap '56. (MLRA 9:7)

1. Is fisiologicheskoy laboratorii (sav. - doktor biologicheskikh
nauk I.S.Kandrov) Instituta obshchey i kommunal'noy gigiyeny
AMN SSSR

(MENSTRUATION

rhythm, eff. of polar night in arctic regions)

(DARKNESS, eff.

polar night, on menstrual rhythm in arctic regions)

BEKKER, Z.E.; DMITRIYeva, S.V.; BORISOVA, T.G.; TURKOVA, Z.A.; LISTNA, Ye.S.;
CHAPLINA, L.B.

Characteristics of the development of molds producing various
antibiotic and antiblastic substances. Mikrobiologija 34 no.4:653-
660 Jl-Ag '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov;
Eksperimental'naya laboratoriya zavoda imeni Karpova; Biologo-
pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta
imeni M.V.Lomonosova.

SADOV, F.I., doktor tekhn. nauk, prof.; CHAPLINA, N.D.; IVLIYEV, V.G.; LUR'YE, A.L.; ABEZGUZ, A.Ya.; DYNIN, F.M.; ESKIN, I.L.; VASIL'YEV, G.V.; GAL'PERIN, M.M., retsenzent; IL'INSKIY, N.S., retsenzent; MORYGANOV, P.V., doktor tekhn. nauk, prof., retsenzent; MOSHKIN, V.I., retsenzent; RUDAKOV, D.N., retsenzent; TSVETKOV, M.N., retsenzent; DUKHOVNYY, F.N., red.

[Design and planning of finishing factories for the cotton industry] Proektirovanie otdelochnykh fabrik khlopchato-bumazhnoi promyshlennosti. Moskva, Legkaia industriia, 1965. 355 p. (MIRA 18:7)

CHAPLIN SKAHA, K-14

✓ 6718. Influence of proprine on the salivary glands. K. N.
S. J. H. 1961

1718

Abstract
The influence of proprine on the salivary glands was studied in the rat. It was found that proprine stimulates the salivation of the rat. This effect is dose related and is probably mediated by the central nervous system. The mechanism of action of proprine on the salivary glands is not clear. It may be due to direct stimulation of the salivary glands or to an indirect effect via the central nervous system. The results suggest that proprine may have a stimulatory effect on the salivary glands.

CHAPLINSKAYA, M. G., Candidate Pharmaceut Sci (diss) -- "Phytochemical investigation of St. John's wort and the manufacture of pharmaceutical preparations from it". L'vov, 1959. 13 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov, Pharmaceutic Faculty), 200 copies (KL, № 24, 1959, 153)

CHAPLINSKAYA, M.G.

Determining the choline-like substances in the Hypericum tops.
Apt.delo 8 no.1:58-60 Ja-F '59. (MIRA 12:2)

1. Iz kafedry tekhnologii lekarstvennykh form i galenovykh pre-
paratov (zav. - dots. G.A. Karpenko) L'vovskogo meditsinskogo
instituta.

(CHOLINE) (ST.-JOHN'S-WORT)

CHAPLINSKAYA, M.G.

Phytochemical investigation of the grass Hypericum and of drugs
prepared from it. Apt. delo 9 no. 5:93 S-0 '60. (MIRA 13:10)
(HYPERICACEAE—THERAPEUTIC USE)

CHAPLINSKAYA, M.G. [Chaplyns'ka, M.H.]; GOLOVKIN, V.O. [Holovkin, V.S.],
student

Antimicrobic effect of some extracts from calendula inflorescences.
Farmatsev. zhur. 18 no.2:56-60 '63. (MIRA 17:10)

1. L'vovskiy meditsinskiy institut.

CHAPLINSKAYA, S. B.

33609 Opyt Primeneniya Ezerina Pri Posledstviyakh Porazheniya Nervnoy Sistemy.
Sbornik Nauch. Rabot (Ryaz, Obl. Otd. Zdravookhraneniya), Vyp. 2,
1949, C. 85-96

SO: Letopis'nykh Statey, Vol. 45, Moskva, 1949

CHAPLINSKAYA, S. B.

33568. K Voprosu O Razvitiii Abstsessov Mozga Posle Zakrytykh Travm Cherepa. Sbornik
Nauch. Rabot (Ryaz. Obl. Otd. Zdravookhraneniya), Vyp. 2, 1949, c. 97-100

SO: Letopis'nykh Statey, Vol 45, Moskva, 1949

CHAPLINSKAYA, S.B.: VOYTEKHO, V.A.

Effect of sea water baths on the organism. Vop.kur.fizioter. i
lech.fiz.kul't. no.1:67-72 Ja-Mr '55. (MLRA 8:8)

1. Sanatori Krasnoye Krivorizh'e v Alushte (glavnyy
vrach A.I. Spiridonov, nauchnyy rukovoditel'--prof. A.B. Shakhna-
zarov)
(THALASSOTHERAPY)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9

CHAPLITSKAYA, V.L.; SELIVANOV, N.P.; MURASHOV, Yu.S.; VASILENKO, S.V.

Plastic foams for lightweight roofs of industrial buildings.
Stroi. mat. no.11:29-30 N '65. (MIRA 18:12)

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000308120017-9"

CHAPLINSKIY, A., starshiy leytenant

Arrangement for installing trestle bents. Voen.-inzh. zhur.
102 no.6:35-38 Je '58. (MIRA 11:6)
(Military bridges--Equipment and supplies)

ETTINGER, I.L.; CHAPLINSKIY, A.; LAMBA, Ye.G.; ADAMOV, V.G.

Comparative sorption capacity of fossil coals as compared to carbon dioxide gas and methane under pressures ranging up to 40 atm. Dokl. AN SSSR 161 no.1:214-217 Mr '65.

1. Submitted July 4, 1964.

(MIRA 18:3)

CHAPLINSKIY, A.B.

REMEZ, G.A., LITVIN, V.M., KUKIN, N.P., CHAPLINSKIY, A.B.

"Radio" (Radiodelo), edited by G.A. Remez. Voyennoye Izdatel'stvo,
327 pp., 1947.

CHAPLINSKIY, A.B.

Concerning a composite amplitude modulation circuit. Izv.vys.
ucheb.zav.; radiotekh. 7 no.5:635-636 S-0 '64.

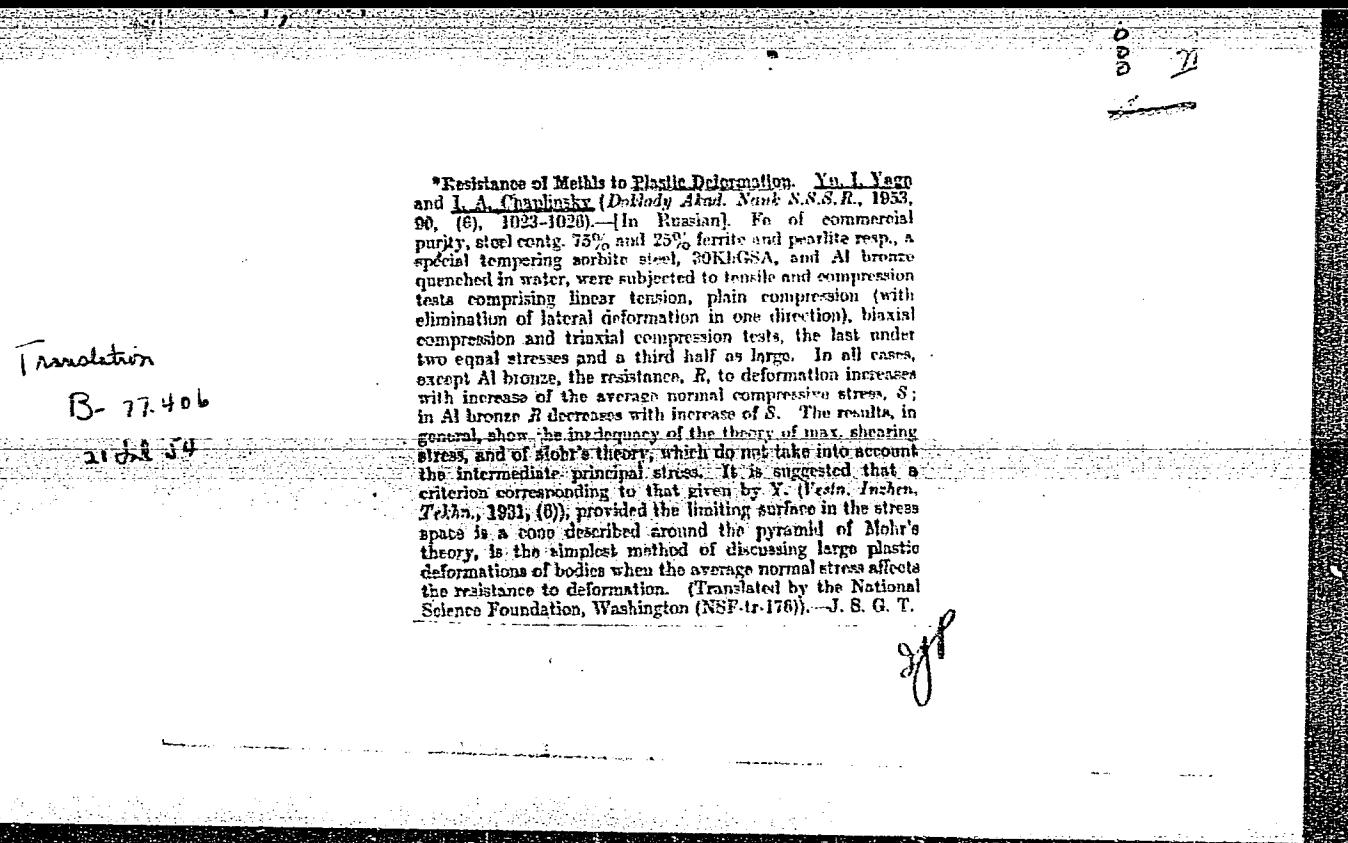
(MIRA 18:4)

ZHUK, I.P., brigadir; CHAPLINSKIY, I.A. [Chapline 'kyi, I.A.], brigadir

Let's honor the party with victories attained by labor. Mekh.sil'.
hosp. 9 no.11:3 N '58. (MIRA 11:12)

1. Traktornyye brigady kolkhoza "Peremoga" Rovenskogo rayona, Rovenskoy oblasti.

(Collective farms)



18.8200

29085

S/521/60/000/014/008/015
E081/E135

Chaplinskiy, I.A.

AUTHOR: Chaplinskiy, I.A.
TITLE: Plastic deformation of metals under simple loading
SOURCE: Akademiya nauk SSSR. Sibirskoye otdeleniye. Khimiko-metallurgicheskiy institut. Trudy. no.14. Novosibirsk, 1960. Metallovedeniye i prochnost' metallov. 77-87.

TEXT: The metals tested were: technically pure iron, steel 25, steel 30KhGSA (30KhGSA), and aluminium bronze, all heat treated to a stable structure. In addition, the two steels and the aluminium bronze were heat treated to obtain a metastable structure, the steels by quenching and medium annealing, the aluminium bronze by quenching in water. All the metals were tested in linear extension and compression, constrained compression, biaxial compression with equal stress components, and triaxial compression with two stress components equal and the third double the other two. The experimental methods for realising these stress systems are described in detail; all the stress and strain tensors corresponded with coaxiality of the stress and strain tensors. Stress-strain curves are given and the following conclusions are

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drawn: 1) For all the metals tested, the plastic deformation curves plotted in coordinates of the theory of potential energy of the change in shape differ among themselves. 2) For metals with a metastable structure considerable divergence is observed between the curves obtained in conditions of coaxiality between the stress and strain tensors under simple loading conditions. In the case of metals with a stable structure the divergence is not large, but at large deformations it is not negligible. 3) With simple loading under conditions of coaxiality of the stress and strain tensors, the influence of the magnitude of the spherical stress tensor on the resistance of metals to plastic deformation is approximately linear when plotted as intensity of the initial stress against intensity of the initial strain. N.N. Davidenkov, N.I. Spiridonova and S.I. Ratner are mentioned in the article for their contributions in this field.

There are 5 figures and 9 references; 7 Soviet-bloc and 2 English. The English language references read as follows:
Ref.6: P.W. Bridgman, J. of Appl. Phys., 1946, pp. 17, 3, 201.
Ref.7: E.A. Davis, J. of Appl. Mechanics, V.10, 1943, A-187, p.4.
J. of Appl. Mechanics, V.12, 1945, A-13, p.27.

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A006/A101

AUTHOR: Chaplinsky, I.A.

TITLE: Plastic deformation curves in coordinates of the Coulomb and Mises-Henky theory

PERIODICAL: Referativnyy zhurnal: Metallurgiya, no. 3, 1961, 24, abstract 3Zh155 ("Tr. Khim.-metallurg. in-ta Sib. otd. AN SSSR", no. 14, 1960, 89-95)

TEXT: The author studied divergences between plastic deformation curves of poly-crystalline metal, plotted in the coordinates of the theory of potential energy of shape changes and the theory of maximum tangential stresses. For this purpose 30XГСА (30KhGSA) steel was tested under conditions of linear stretching and compression, constrained compression ($\bar{\epsilon}_2 = 0$), bi-axial equal compression and tri-axial one ($\bar{\sigma}_3 = \bar{\sigma}_2 = 2\bar{\sigma}_1 < 0$). The steel was heat treated to a metastable structure at medium tempering. During the aforementioned five types of test the coaxiality of tensors and the similarity between the deviators of stresses and deformations were observed (the tests were performed under conditions of plain loading). It is shown that the plastic deformation curves plotted in

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the coordinates of the theory of maximum tangential stresses and in the coordinates of the theory of potential energy of shape changes are divergent; the curves are less divergent in the coordinates of the theory of potential energy of shape changes. The non-symmetrical case of the stress tensor in the coordinates $\sigma_1 - \sigma_3$ and $\epsilon_1 - \epsilon_3$ violates the definite sequence in the arrangement of plastic deformation curves, which is observed in coordinates σ_1 and ϵ_1 . The author reveals the clear advantage of coordinates of the theory of potential energy of shape changes over those of the theory of maximum tangential stresses when plotting in these coordinates the resistance curves of metals to high residual deformations. Moreover, the author shows the effect of the magnitude of the spherical component of the stress tensor on the deviation tensor over the whole range of the plastic zone. There are 8 references.

L. G.

[Abstracter's note: Complete translation.]

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1327, 4016 1530, 3108, 191, 3309 S/521/60/000/014/010/015
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AUTHOR: Chaplinskiy, I.A.

TITLE: A plasticity function

SOURCE: Akademiya nauk SSSR. Sibirskoye otdeleniye.
Khimiko-metallurgicheskiy institut. Trudy. no. 14.
Novosibirsk, 1960. Metallovedeniye i prochnost'
metallov, pp. 97 - 103

TEXT: Earlier work on the subject was published by the author in a dissertation in 1951 and in a symposium of papers published in Novosibirsk in 1957. A reliable theory of plasticity is required for the proper design of structures and for the prediction of the behaviour of materials under complex stress conditions from the behaviour under simple stress conditions. Experiment shows that the Saint Venant-Mises criterion does not adequately represent plastic behaviour. A better, although still not perfect representation is given by the theory of potential energy of form change. Stress-strain curves are reproduced for steel CT-25 (ST-25) deformed in torsion, tension and compression, and a plasticity function is

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developed in the form:

$$(1 + \eta\xi)(\bar{\sigma}_i + A\bar{\sigma} + B) = \varphi(\bar{\epsilon}_i)$$

where: $(1 + \eta\xi)$ is a function of the non-coaxiality of the strain and stress tensors;

η coefficient of non-coaxiality;

$\bar{\sigma}_i$ true stress intensity;

$\bar{\sigma}$ value of the true stress spherical tensor;

A a quantity determined empirically from tests in tension, compression and torsion;

B a quantity allowing for the influence of the form of the stress deviator on the resistance of metals to plastic deformation;

$\varphi(\bar{\epsilon}_i)$ is a function of the strain intensity.

Particular cases of this equation are discussed; for coaxial

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deformation of pure metals or metals with a stable structure, the generalised plasticity function reduces to the Mises-Hencky function, provided $B \approx 0$ and the influence of σ^* on the plastic deformation is small. There are 2 figures and 8 Soviet-bloc references.

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AUTHOR: Chaplinskiy, I.A.
TITLE: Plasticity equations
SOURCE: Akademiya nauk SSSR. Sibirskoye otdeleniye.
Khimiko-metallurgicheskiy institut. Trudy. no. 14.
Novosibirsk, 1960. Metallovedeniye i prochnost'
metallov, pp. 105 - 111

TEXT: The paper is a continuation of previous work published by the author in 1957 and 1958. In this paper, he arrives at the conclusion that analysis of the stress-strain relations of plasticity leads to the derivation of three quantities connected with plasticity; the normal plasticity modulus D; the dimensionless parameter δ characterising plasticity in linear extension and the dimensionless parameter n characterising the penetration of a sphere or cone into the metal. For metals which develop a neck on extension it is found experimentally that:

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Plasticity equations

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$$\delta = \frac{(n - 1)(n - 2)}{2} \quad (10)$$

Data supporting this relationship are given for 5 steels and 1 brass. Data are also given for extensional strain, plasticity modulus, extensional stress corrected for necking and the stress corresponding to penetration of a sphere for the steels **30ХГСА** (30KhGSA), **ЛТ-3** (ST-3), **ЛТ-45** (ST-45) and the brass **Л70** (L70). The stress in extension and the stress corresponding to penetration of a sphere are found to agree to within a few percent.

There are 4 Soviet-bloc references.

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AUTHORS: Chaplinskiy, I.A., Kashcheyev, A.F., Kolmogorova, V.P.

TITLE: On corrections to strained state in the journal of specimens

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1961, 26, abstract 32h164 ("Tr. Khim.-metallurg. in-ta Sib. otd. AN SSSR", no. 14, 1960, 153-158)

TEXT: Corrections to mean tensile stress in the journal of specimens suggested by a number of authors, were experimentally checked. A comparison was made of linear elongation and compression curves of quenched and tempered "50" grade steel and technically pure Fe in delivery state. During compression tests friction forces, acting upon the transmission planes of compressing forces, were removed by multiple greasing of the specimen butts. A comparison of plastic deformation curves was made in coordinates of intensity of true stress σ_1 versus intensity of true deformation ϵ_1 . It was established that the corrections to the strained state in the specimen journal suggested, were insufficient, in particular for metals with a metastable structure, due to the effect of the magnitude of the spherical component of the stress tensor. It is shown that when using N.N. Davi-

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